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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: 54704.8036.US03 (UMD-0072)
Inventors: John Langenfeld
Serial No.: 10/692,824
Filing Date: October 23, 2003
Examiner: Not Yet Assigned
Group Art Unit: 1642
Title: Bone Morphogenetic Protein-2 In the
Treatment and Diagnosis of Cancer

I, Jane Massey Licata, Registration No. 32,257,
certify that this correspondence is being deposited
with the U.S. Postal Service as First Class mail in
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P.O. Box 1450, Alexandria, VA 22313-1450

On this date: November 1, 2004

Jane Massey Licata
Jane Massey Licata, Registration No. 32,257

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

(XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into

the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

() In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

() Certification in Accordance with §1.97(e) is attached hereto; or

() Authorization to charge Deposit Account No. 50-1619 the fee of \$180.00 as set forth in §1.17(p) is provided.

() In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I) (1).

(XX) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

() In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified)

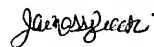
are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____, filed _____, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

() The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,

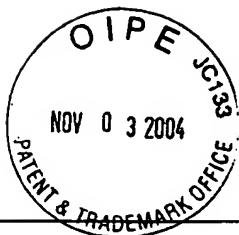


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Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce	Docket No. 54704.8036.US03 (UMD-0072)	Serial No. 10/692,824
	Applicant John Langenfeld	
	Filing Date October 23, 2003	Group 1642

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AA	Abe et al., "Essential Requirement of BMPs-2/4 for Both Osteoblast and Osteoclast Formation in Murine Bone Marrow Cultures from Adult Mice: Antagonism by Noggin", Journal of Bone and Mineral Research 2000 15(4):663-673
	AB	An et al., "Recombinant human bone morphogenetic protein-2 induces a hematopoietic microenvironment in the rat that supports the growth of stem cells", Experimental Hematology 1996 24:768-775
	AC	Brunet et al., "Noggin, Cartilage Morphogenesis, and Joint Formation in the Mammalian Skeleton", Science 1998 280:1455-1457
	AD	Capdevila et al., "Endogenous and Ectopic Expression of noggin Suggests a Conserved Mechanism for Regulation of BMP Function during Limb and Somite Patterning", Developmental Biology 1998 197:205-217
	AE	Chen et al., "Suppression of Tumor Necrosis Factor-mediated Apoptosis by Nuclear Factor κ B-independent Bone Morphogenetic Protein/Smad Signaling", Journal Biological Chemistry 2001(42):39259-39263
	AF	Cunningham et al., "Osteogenin and recombinant bone morphogenetic protein 2B are chemotactic for human monocytes and stimulate transforming growth factor β_1 mRNA expression", Proc. Natl. Acad. Sci. USA 1992 89:11740-11744
	AG	Glavic et al., "Xiro-1 Controls Mesoderm Patterning by Repressing <i>bmp 4</i> Expression in the Spemann Organizer", Developmental Dynamics 2001 222:368-376
	AH	Guo et al., "Expression of Bone Morphogenetic Proteins and Receptors in Sarcomas", Clin. Orthop. 1999 1(365):175-183
	AI	Hatakeyama et al., "Expression of Bone Morphogenetic Proteins of Human Neoplastic Epithelial Cells", Biochemistry and Molecular Biology International 1997 42(3):497-505

EXAMINER	DATE CONSIDERED
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	AJ	Hollnagel et al., "Id Genes Are Direct Targets of Bone Morphogenetic Protein Induction in Embryonic Stem Cells", Journal Biological Chemistry 1999 274(28):19838-19845
	AK	Kleeff et al., "Bone Morphogenetic Protein 2 Exerts Diverse Effects on Cell Growth In Vitro and Is Expressed in Human Pancreatic Cancer in Vivo", Gastroenterology 1999 116:1202-1216
	AL	Liu et al., "Angiogenin Activates Erk ½ in Human Umbilical Vein Endothelial Cells", Biochemical and Biophysical Research Communications 2001 287:305-310
	AM	Locklin et al., "Assessment of Gene Regulation by Bone Morphogenetic Protein 2 in Human Marrow Stromal Cells Using Gene Array Technology", Journal of Bone and Mineral Research 2001 16(12):2192-2204
	AN	Millet et al., "The human <i>chordin</i> gene encodes several differentially expressed spliced variants with distinct BMP opposing activities", Mechanisms of Development 2001 106:85-96
	AO	Ogata et al., "Bone morphogenetic protein 2 transiently enhances expression of a gene, Id(inhibitor of differentiation), encoding a helix-loop-helix molecule", Proc. Natl. Acad. Sci. USA 1993 90:9219-9222
	AP	Schindl et al., "Level of Id-1 Protein Expression Correlates with Poor Differentiation, Enhanced Malignant Potential, and More Aggressive Clinical Behavior of Epithelial Ovarian Tumors", Clinical Cancer Research 2003 9:779-785
	AQ	Tucker et al., "Transformation of Tooth Type Induced by Inhibition of BMP Signaling", Science 1998 282:1136-1138
	AR	Weaver et al., "Bmp signaling regulates proximal-distal differentiation of endoderm in mouse lung development", Development 1999 126:4005-4015

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Sheet 03 of 03

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AS	Willette et al., "BMP-2 Gene Expression and Effects on Human Vascular Smooth Muscle Cells", J Vasc Res 1999 36:120-125	
	AT	Zebedee et al., "Id proteins in cell cycle control and cellular senescence", Onogene 2001 20:8317-8325	
	AU	Zimmerman et al., "The Spemann Organizer Signal noggin Binds and Inactivates Bone Morphogenetic Protein 4", Cell 1996 86:599-606	
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